



Fig. 1. Schematic representation of the experiment. The effect of the four anthelmintics (namely, levamisole, pyrantel, methyridine, and tribendimidine) is tested on active, wild-type *C. elegans*. The dose-response data are fed into an FSC scheme that suggests new combinations of the four anthelmintics to test for worm survivability. Through multiple iterations of trying nonoptimal combinations and using a directed evolutionary search, the winning cocktail is eventually reached that makes the worm inactive, as judged by the values of average centroid velocity and track curvature.